

Towards a Robust and Sustainable Open-Source Software Ecosystem for Future Wireless Research and Development

September 25, 2024, 8:30-5:00 PM

<https://www.nitrd.gov/opensource-wireless/>

Agenda

8:40 AM	Keynote – Dr. Tom Rondeau (DoD): USG Future Wireless R&D Vision, Requirements, and the Need for OSS
9:00 AM-10:15 AM	Session 1: Customer and sponsor perspectives on OSS requirements for future wireless & spectrum R&D Session objective: To understand and discuss requirements, challenges, and potential of OSS ecosystems from the perspective of customers and sponsors of wireless & spectrum R&D. Topics: <ul style="list-style-type: none">– Gaps, unmet requirements, and challenges in application of OSS in wireless & spectrum R&D– OSS requirements to support next-generation spectrum sharing– Current uses of and interactions with wireless OSS ecosystem in R&D programs– Skilled workforce development in OSS and future wireless
10:15 AM-10:35 AM	BREAK
10:35 AM-11:50 AM	Session 2: The current state of the wireless OSS ecosystem Session Objective: To understand and discuss the capabilities, development plans, collaboration opportunities, and governance processes associated with open-source software initiatives that are relevant to future wireless research. A particular focus of this session will be to examine the current and potential future involvement of Federal R&D in the evolution of OSS platforms. Topics: <ul style="list-style-type: none">– Summary of current wireless & spectrum-related OSS program(s)– Roadmap of future OSS development plans– Overview of current OSS governance and licensing models– Examples and perceived barriers to Federal collaboration and coordination
11:50 AM-12:35 PM	LUNCH



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<p>12:35 PM-1:40 PM</p>	<p>Session 3: Emerging security and resilience requirements</p> <p>Session Objective: To explore the intersection of open-source software and emerging security and resilience requirements. This session will address the evolving security landscape, highlighting the role of open-source solutions in advancing cybersecurity defenses and the challenges they present.</p> <p>Topics:</p> <ul style="list-style-type: none"> – Emerging standards for enhanced wireless security & resilience – Existing security Initiatives within wireless OSS communities – Unique security challenges for future wireless systems (e.g., intelligent network control, virtualized and shared infrastructure) – Broad Federal initiatives to secure OSS ecosystems
<p>1:40 PM-2:55 PM</p>	<p>Session 4: Researcher and experimenter perspectives on leveraging OSS to support wireless & spectrum R&D</p> <p>Session Objective: To discuss the specific projects and programs where OSS is being applied to wireless & spectrum R&D, highlighting requirements, constraints, and challenges of OSS ecosystems from the perspective of researchers & experimenters in wireless & spectrum fields.</p> <p>Topics:</p> <ul style="list-style-type: none"> – Gaps, unmet requirements, and challenges in the application of OSS in wireless & spectrum R&D – OSS requirements to support next-generation spectrum sharing – Current uses of and interactions with wireless OSS ecosystem in R&D programs – Skilled workforce development in OSS and future wireless
<p>2:55 PM-3:15 PM</p>	<p>BREAK</p>
<p>3:15 PM-4:20 PM</p>	<p>Session 5: Increasing transparency and confidence in OSS supply chains</p> <p>Session Objective: To examine how the Federal R&D and open-source communities can collaborate to increase transparency and confidence in OSS supply chains and their ability to meet USG requirements.</p> <p>Topics:</p> <ul style="list-style-type: none"> – Requirements for conformance, interoperability, security, and performance testing – Federal initiatives to enhance open-source and testing ecosystems – How to leverage industry-driven test and certification programs? – How to incentivize OSS efforts to support federal R&D programs?
<p>4:20 PM-4:30 PM</p>	<p>Concluding remarks and next steps</p>

